

8 09/821,962 LUC-159/Posthuma 28

**Remarks**

Entry of the above-noted amendments, reconsideration of the application, and allowance of all claims pending are respectfully requested. Claims 1-10, 15-17, 19-36, 38-47, 54, 55 and 57-58 are pending.

Applicant's arguments presented below focus on certain patentable differences between the invention as claimed and the applied references. However, it is not to be inferred that the failure to argue all differences between the claimed subject matter and the applied references constitutes acceptance of assertions made in the Office Action of alleged similarities between elements of the claimed subject matter and the applied references.

Double Patenting Rejection:

Claims 1, 4, 31, 33, 42 and 48 were rejected for obviousness-type double patenting based on claims 1, 13 and 18 of U.S. Patent No. 6,898, 280. In view of the current amendments to the claims of the subject application, an obviousness-type double patenting rejection is no longer appropriate in view of the differences between the current claims and the claims in the '280 patent. For example, none of claims 1, 13 and 18 of the '280 patent recite that the selected telecommunication services to be provided concurrently on a single subscriber line. For this as well as other differences between the current claims and the claims in the '280 patent, the double patenting rejection is not appropriate and is requested to be withdrawn.

Claim Rejections - 35 U.S.C. §102

Claims 1-6, 15, 48 and 49 were rejected under 35 U.S.C. 102 as being anticipated by Valentine (U.S. Patent No. 6, 356,547). This rejection is traversed.

It is well-settled that there is no anticipation unless (1) all the same elements are (2) found in exactly the same situation and (3) are united in the same way to (4) perform the identical

function. Since the applied reference is missing at least one requirement of each of applicants' independent claims, applicants respectfully submit that the claimed invention is not anticipated by the applied reference, as further discussed below.

Re: Claim 1

In accordance with claim 1, a telecommunication line card is defined as comprising a **multiple mode circuit adapted for installation in equipment at a central office** that provides at least one of POTS service and ISDN service on a single subscriber line **while concurrently providing a xDSL service on the same single subscriber line**. A control receives instructions from an external device and configured the multiple mode circuit to operate with the selected telecommunication services. The external device comprises one of a broadband element management system, a PSTN switch and a PSTN maintenance center.

The requirements accordance with claim 1 are not disclosed or rendered obvious by Valentine. As shown in Valentine, FIG. 2 and text at column 5, lines 44-51, the line circuit 75 is utilized in a digital loop carrier (DLC) 42. A DLC such as 42 in FIG. 1 is disposed at a remote location relative to the supporting central office 35 and is connected by trunk line 45. The DLC acts as a remote concentrator of subscriber lines and is responsible for routing calls between subscribers and a central office; see column 1, lines 50-54. Therefore, Valentine does not teach or suggest a multiple mode circuit adapted for installation in equipment at a central office. In fact, Valentine discloses little about the apparatus installed at the central office. Those of ordinary skill in the art will understand that circuitry normally designed for use in digital loop carrier equipment is not interchangeable for use in a central office based on the different operational requirements and interfaces. Therefore, the line circuit 75 disclosed as used in the DLC according to Valentine does not disclose and is not equivalent to a multiple mode circuit for equipment at a central office in accordance with claim 1. For the same reasons described with regard to line circuit 75, the line circuit 100 of FIG. 3 similarly fails to disclose a multiple mode circuit for equipment at a central office. It will be noted that the line circuit 100 is part of the DLC which is the primary subject to Valentine. Thus, the rejection of claim 1 based on Valentine should be withdrawn.

10 09/821,962 LUC-159/Posthuma 28

Claim 1 further recites that either the POTS or ISDN service is provided concurrently with the xDSL service on a single subscriber line. As shown in Valentine FIG. 3, multiple subscriber line pairs 102 are coupled to the multiplexer 104 for connection with the DLC. One of ordinary skill in the art would understand upon a reading of Valentine that a single subscriber line is only concurrently provided with one service, not multiple services.

The line multiplexer 104 includes an array of programmable frequency shift devices 106A: 106E that are coupled to individual subscriber line pairs. Column 7, lines 11-13.

The A/D converter 64 can sample an incoming signal within the transmission band associated to each copper wire pair depending on **the service utilized by the subscriber**. (Emphasis added – one service) Column 7, lines 31-34.

For example, should the subscriber 15 want to change from being an analog subscriber using POTS to an ISDN subscriber or one of the xDSL variant protocols, the change can be implemented in the memory space 68 through the store algorithms. The store algorithms operate the DSP 66 and cause a to implement the communications protocol desired by the subscriber 15 column 6, lines 15-22. [Note: protocol is singular.]

A line circuit configuration suitable for this purpose is shown in FIG. 3 wherein a plurality of programmable frequency shift devices 106A: 106E are coupled to the subscriber-side line pairs based on the spectral content associated with each line pair. Column 6, lines 40-44. [That is, this teaches that only one service associated with each specific spectral content is provided to any given subscriber line.]

Valentine does not teach concurrently providing on a single subscriber line different communication services as required by claim 1. Thus, Valentine does not teach the subject requirement of claim 1 and the 35 U.S.C. 102 rejection of claim 1 should be withdrawn.

Independent claim 4 is believed to be allowable over Valentine for similar reasons explained above with regard to claim 1.

Independent claims 17, 31, 33 and 42 were rejected under 35 U.S.C. 103 as being on patentable over Valentine in view of Ham. The Ham reference was only cited for teaching POTS with PPM

11 09/821,962 LUC-159/Posthuma 28

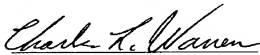
service. Therefore, these claims are believed to be allowable for similar reasons explained above with regard to claim 1.

Independent claim 54 was rejected under 35 U.S.C. 103 as being unpatentable over Valentine in view of Ham and in further view of Barker. Again, Ham was only cited for teaching POTS with PPM service. Barker was only cited with regard to disclosing P-phone services. Therefore, claim 54 is believed to allowable for similar reasons explained above with regard to claim 1.

The claims depending on the above-referenced independent claims are believed to be allowable based on additional patentably distinguishing subject matter presented in the dependent claims as well as depending on an allowable claim.

In view of the above amendments and remarks, allowance of all claims pending is respectfully requested. If a telephone conference would be of assistance in advancing the prosecution of this application, the Examiner is invited to call applicants' attorney.

Respectfully submitted,



Charles L. Warren  
Attorney for Applicants  
Reg. No. 27,407

Dated: October 24, 2006

PATTI & BRILL, LLC  
Customer Number 32205